

REMARKS

In response to the final Office Action mailed January 10, 2008 and the Advisory Action mailed May 22, 2008, Applicant respectfully requests reconsideration in view of the amendments and Request for Continued Examination (RCE) submitted herewith.

Claims 1-9 were previously pending. Claim 1 is amended herein. No claims have been added or canceled. Accordingly, claims 1-9 are pending, of which claims 1 and 7 are in independent form.

Claim 1 has been amended to further clarify that only a single device of the plurality of devices includes an address associated with the transmission indicator.

Rejection of Claims Under 35 U.S.C. § 103

The final Office Action rejected claims 1-9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0169886 to Saito et al. (hereinafter "Saito") in view of U.S. Patent No. 5, 666,363 to Osakabe et al. (hereinafter "Osakabe"). Applicant respectfully traverses this rejection.

The Disclosure of Saito

Saito is directed to enabling the operation of a control protocol such as Echonet on networks such as Bluetooth, IP, etc.(Saito at paragraph 0002). A master node (Echonet controller 1) periodically sends an inquiry to detect the presence of a new device that is attempting to join the network (Saito at paragraph 0063). The new device responds so that the master device can give it a proper address according to the data exchange protocol used (Saito at paragraphs 0058, 0074-0075). In regular data exchange operation, when a slave device A wants to transmit a frame to a slave device B, the slave device A transmits the frame to the master device, the frame including the destination address of the slave device B (Saito at paragraph 0098).

The Disclosure of Osakabe

Osakabe discloses a method of exchanging data between devices such as television TV 10, video tape recorders VTR20, 30 and video disk player VDP 40 (Osakabe Col. 1, lines 7-14). Frames are transmitted on a bidirectional bus 1 according to a carrier sense multiple access with

collision detection (CSMA/CD) technique (Osakabe Col. 8, lines 42-48). A frame contains a master address field 52 for designating the address of an originating device and a slave address field 53 for designating a destination device (Osakabe Col. 9, lines 6-12 and FIG. 9). A frame can be transmitted from a sub-device enclosed in a device to another device, from a device to a sub-device enclosed in another device, or from a device to another device (Osakabe Col. 10, lines 19-29).

The Office Action Fails to Establish a *Prima Facie* Case of Obviousness over Saito in view of Osakabe

According to § 706.02(j) of the MPEP:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The final Office Action fails to meet at least two of these three criteria. Specifically, the final Office Action's asserted suggestion or motivation to combine Osakabe with Saito is refuted by Saito itself and the asserted combination of Saito and Osakabe does not disclose, teach, or suggest all the claim limitations of any of claims 1-9.

On page 4, the final Office Action asserts that the motivation to combine Saito and Osakabe would be "in order for bi-direction communication between devices." Both the Final Office Action and the Advisory Action assert that this motivation is provided in Osakabe at col. 1, lines 5-15. This asserted motivation makes NO SENSE (technically, legally, or otherwise). Both Saito and Osakabe are directed to bi-directional communication systems. ***Simply put, no one of ordinary skill in the art would be motivated to modify the device of Saito in the manner asserted(i.e., to enable bi-directional communication) because Saito is already a bi-directional communication system.*** (Saito at paragraph 0002).

Furthermore, the devices of Saito and Osakabe are directed to fundamentally different systems. Saito is directed to using a specific control protocol (Echonet) on bi-directional ***networks*** such as Bluetooth and IP. (See Saito at paragraphs 0002 and 0016). By contrast,

Osakabe is directed to a specific and industry standard bi-directional *bus* for controlling audio-visual systems, namely D2B systems and HBS systems prescribed in IEC Publication 1030 and EJIA ET-2101. (See Osakabe at col. 1, lines 20-40 and col. 6, lines 46-53, for example). The Office Action fails to provide any rational basis why one of ordinary skill in the art would seek to modify an industry standard network communication protocol with an optimization of a specific audio-visual bus protocol such as described in Osakabe. Accordingly, the final Office Action and the Advisory Action fail to provide a proper basis as to why one of ordinary skill in the art would combine these references, and therefore, the rejection of claims 1-9 under 35 U.S.C. § 103(a) over the asserted combination of Saito in view of Osakabe should be withdrawn.

Moreover, even if one combined the teachings of Saito and Osakabe (for the reason asserted, or for any other reason) the combination would not disclose, teach, or suggest all of the limitations in Applicant's claims.

Claims 1-9 Patently Distinguish Over Saito in View of Osakabe

Independent claim 1 is directed to a method for exchanging information frames over a network between a plurality of devices. Each device of the plurality of devices comprises a communication circuit connected to a processing unit and also comprises a plurality of addresses. Each address is associated with one of a transmission indicator or a reception indicator. Each address is associated with a memory containing an information frame that can be at least one of modified and read by the processing unit. Only a single device of the plurality of devices includes one of the plurality of addresses that is associated with the transmission indicator. The method comprises the steps of having a master device periodically transmit an address of the plurality of addresses, and responsive to transmission of the address by the master device, having the communication circuit of the single device for which the address transmitted by the master device is associated with the transmission indicator transmit the information frame contained in the memory associated with the address and provide its processing unit with an identifier of the address, and having the communication circuit of each device for which the address transmitted by the master device is associated with the reception indicator write into the memory associated with the address the information frame and provide its processing unit with an identifier of the address.

No reasonable combination of Saito and Osakabe discloses, teaches, or suggests the method recited in independent claim 1 because the references, alone and in combination, fail to disclose, teach, or suggest all the limitations of independent claim 1.

On page 2, the final Office Action asserts that “Saito teaches a method for exchanging information frames over a network between a plurality of devices, each device of the plurality of devices comprising a communication circuit connected to a processing unit and comprising a plurality of addresses.” However, in Saito, only the master device (Echonet controller 1) contains an address table 123 (e.g. a plurality of addresses), as shown in Saito FIG. 3. Nowhere does Saito disclose or suggest that the slave devices (Echonet Device A, B, and C) include an address table. Indeed, Saito discloses that address mapping is carried out by the Echonet controller 1, not by any slave device (Saito at paragraphs 0058 and 0061). Thus, Saito fails to disclose “a method for exchanging information frames over a network between a plurality of devices, [wherein] **each device of the plurality of devices compris[es] a communication circuit connected to a processing unit and comprising a plurality of addresses.**” (emphasis added).

The Advisory Action references paragraphs 0118 through 0121 of Saito as disclosing this aspect. They do not. Indeed, those paragraphs say nothing about the structure of any of the Echonet devices A, B, and C as only the structure of the master device (Echonet controller 1) is even described in Saito. The Examiner is requested to specifically point out where the structure of the communication circuits of any of the Echonet devices A, B, or C are described in Saito or withdraw the rejection of claim 1 based thereon.

Furthermore, the final Office Action and the Advisory action fail to identify where the asserted combination of Saito and Osakabe discloses that only a single device of the plurality of devices includes one of the plurality of addresses associated with the transmission indicator as recited in claim 1. Nowhere does either Saito or Osakabe disclose that only a single device of the plurality of devices includes a specific address, of one of the plurality of addresses, that is associated with the transmission indicator.

On page 3, the final Office Action concedes that Saito does not teach “having the communication circuit of the device for which the address transmitted by the master device is associated with the transmission indicator transmit the information frame contained in the memory associated with the address and provide its processing unit with an identifier of the

address; and having the communication circuit of each device for which the address transmitted by the master device is associated with the reception indicator write into the memory associated with the address the information frame and provide its processing unit with an identifier of the address.” However, contrary to the assertion in the final Office Action, nothing in Osakabe teaches these limitations of independent claim 1 either.

On page 3, the final Office Action asserts that Osakabe teaches having the communications circuit of the device for which the address transmitted by the master device is associated with the transmission indicator transmit the information frame contained in the memory associated with the address and provide its processing unit with an identifier of the address. However, the section of Osakabe cited as supporting this proposition (Osakabe at Col. 2, lines 20-65) makes no mention of any information frame contained in memory and associated with an address transmitted by a master device or of providing a processing unit with an identifier of the address.

The Advisory Action cites the exact same section of Osakabe, but provides a bit more detail as to the basis of the rejection. Specifically, the Advisory Action asserts that because Osakabe teaches certain control bits that correspond to certain functions, it therefore teaches “the communication circuit of the device for which the address transmitted by the master device is associated [with the] transmission indicator transmit the information frame contained in the memory associated with the address and provide its processing unit with an identifier of the address.” This is not correct. Although Osakabe does teach control codes that have certain functions, none of the control codes and functions shown in Fig. 3 of Osakabe cause the receiving device to perform the functionality recited in claim 1. Simply put, none of the control codes of Osakabe cause a recipient device to transmit information contained in a memory and corresponding to the address received by the recipient device in response to transmission of that address by the master device.

Similarly, nothing in Osakabe teaches “having the communication circuit of each device for which the address transmitted by the master device is associated with the reception indicator write into the memory associated with the address of the information frame and provide its processing unit with an identifier of the address” as also recited in claim 1. Both the final Office Action and the Advisory Action cite columns 9 and 10 of Osakabe as disclosing this limitation but they do not. Although this section of Osakabe does describe the functionality of certain

control codes, none of the described functionality discloses or suggests the functionality required by claim 1. Accordingly, neither Saito nor Osakabe, alone or in combination, teaches, discloses, or suggests **all** of the limitations of independent claim 1. Thus, for each of the reasons described in detail above, the Office Action fails to establish a *prima facie* case of obviousness of independent claim 1 over Saito in view of Osakabe. Accordingly, withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103 as obvious over Saito in view of Osakabe is respectfully requested.

Dependent claims 2-6 depend either directly or indirectly from independent claim 1 and are patentable over Saito in view of Osakabe for at least similar reasons as independent claim 1. Accordingly withdrawal of the rejection of dependent claims 2-6 under 35 U.S.C. § 103 as obvious over Saito in view of Osakabe is respectfully requested.

Independent claim 7 is directed to a device that can be connected to a network. The device comprises a communication circuit connected to a processing unit and including an address table, a register table, and a direction table. Each register in the register table is associated with an address in the address table. The direction table comprises one direction indicator per address. The processing unit is capable of reading information frames stored into the registers or writing information frames in the registers. The communication circuit is capable, upon reception of a request received from the network and corresponding to one of said addresses, of transmitting over the network the information frame stored in the register associated with said address in response to the corresponding direction indicator being a first determined type, of writing an information frame received from the network into the register associated with said address in response to the corresponding direction indicator being a second determined type, and of transmitting to said processing unit an identifier of the register associated with said address.

The final Office Action also fails to establish a *prima facie* case of obviousness of independent claim 7 over Saito in view of Osakabe. As discussed above, the final Office Action's asserted basis for the combination of Saito and Osakabe is refuted by the references themselves. Further, no combination of Saito and Osakabe discloses, teaches, or suggests each and every limitation of independent claim 7 because neither reference, alone or in combination, discloses all the limitations of independent claim 7.

On page 6, the final Office Action asserts that Saito teaches in FIG. 2 “a device that can be connected to a network comprising a communication circuit connected to a processing unit and including an address table, a register table, and each register in the register table being associated with an address in the address table.” However, Saito’s address table 123 disclosed in FIG. 2 and FIG. 3 is simply a correlation table between Bluetooth addresses, slave identifiers, and Echonet addresses for devices on a network. Neither the address table nor any other component of the Echonet processing unit 12 illustrated in FIG. 2 contains a register table, let alone a register table where each register in the register table is associated with an address in the address table as recited in independent claim 7.

On page 3, the final Office Action concedes that Saito does not teach “the direction table comprising one direction indicator per address, said processing unit being capable of reading information frames stored into the registers or writing information frames in the registers, said communication circuit being capable, upon reception of a request received from the network and corresponding to one of said addresses, of transmitting over the network the information frame stored in the register associated with said address in response to the corresponding direction indicator being a first determined type, of writing an information frame received from the network into the register associated with said address in response to the corresponding direction indicator being a second determined type, and of transmitting to said processing unit an identifier of the register associated with said address.”

However, contrary to the assertion in the final Office Action, nothing in Osakabe teaches these limitations of independent claim 7 either.

The section of Osakabe cited as purportedly teaching these elements (FIGS. 1-11 and Col. 9, line 5 – Col. 10, line 34 (line 65 in the Advisory Action) makes absolutely no mention of any processing unit capable of reading information frames stored into registers or writing information frames into registers, nor any communication circuit capable, upon reception of a request received from the network and corresponding to one of said addresses, of transmitting over the network the information frame stored in the register associated with said address in response to the corresponding direction indicator being a first determined type, of writing an information frame received from the network into the register associated with said address in response to the corresponding direction indicator being a second determined type, and of

transmitting to said processing unit an identifier of the register associated with said address.

Nothing else is Osakabe teaches these elements of independent claim 7 either.

While Applicant acknowledges that Osakabe does disclose certain control codes having various functionality, none of that functionality teaches or suggests all the limitations recited in claim 7. Thus, because the final Office Action fails to establish a *prima facie* case of obviousness of independent claim 7, withdrawal of the rejection of independent claim 7 under 35 U.S.C. § 103 as obvious over Saito in view of Osakabe is respectfully requested.

Dependent claims 8 and 9 depend either directly or indirectly from independent claim 7 and patently distinguish over Saito in view of Osakabe for at least the same reasons as independent claim 7. Accordingly, withdrawal of the rejection of dependent claims 8 and 9 under 35 U.S.C. § 103 as obvious over Saito in view of Osakabe is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, reconsideration is respectfully requested. This application should now be in condition for allowance; a notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check or authorization to charge a deposit account submitted herewith, please charge any deficiency to Deposit Account No. 50/2762.

Respectfully submitted,
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